

FIG. 1

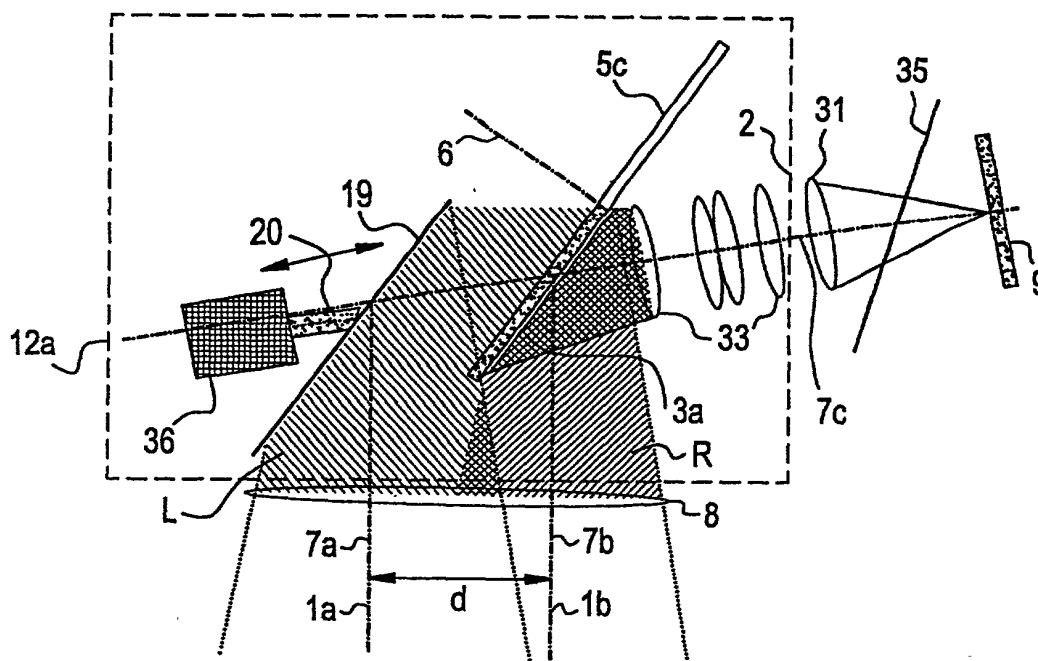


FIG. 2

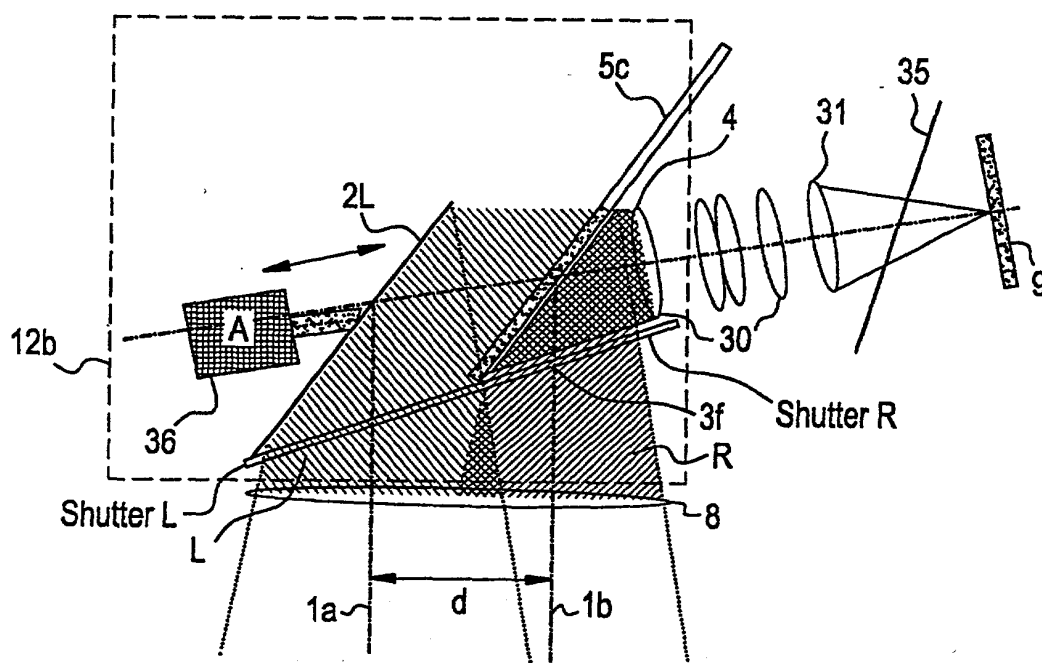


FIG. 3

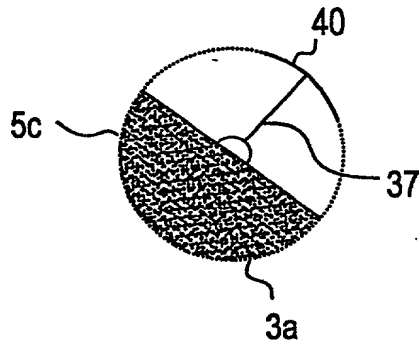


FIG. 4

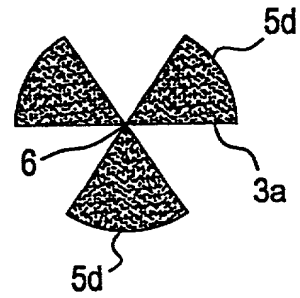


FIG. 5
Prior Art

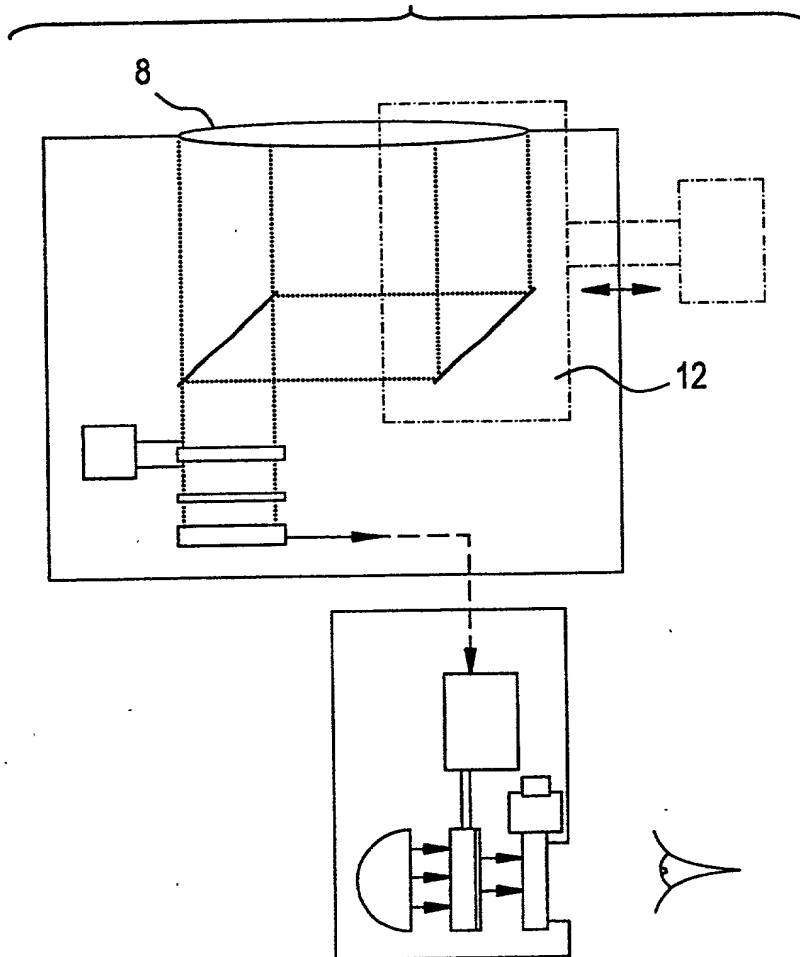


FIG. 6

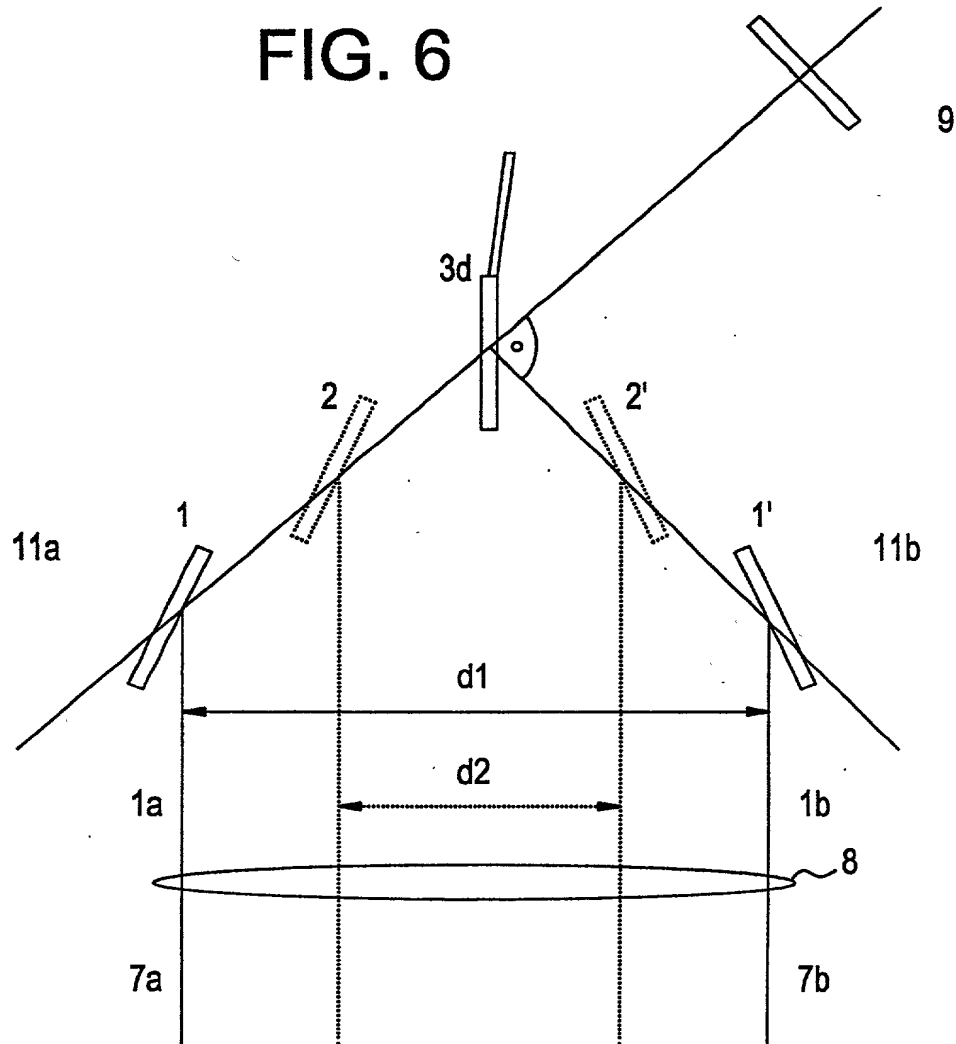


FIG. 7

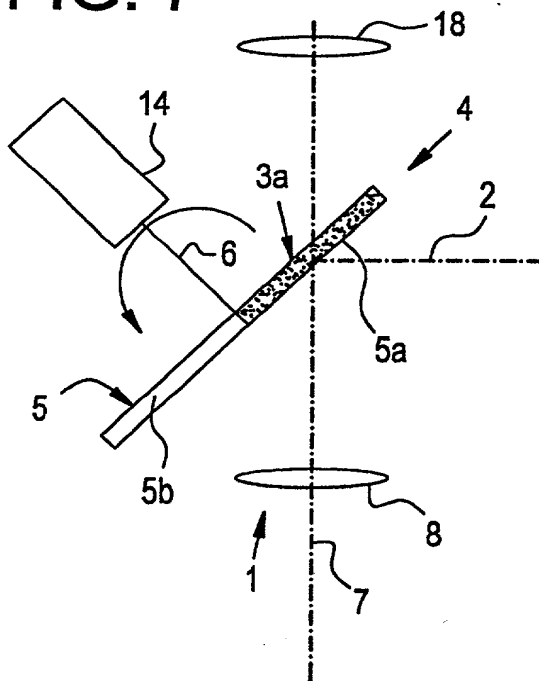


FIG. 8

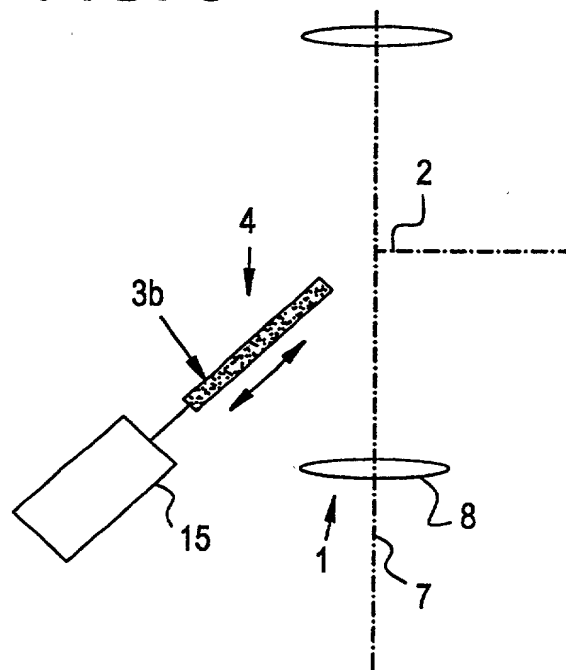


FIG. 9

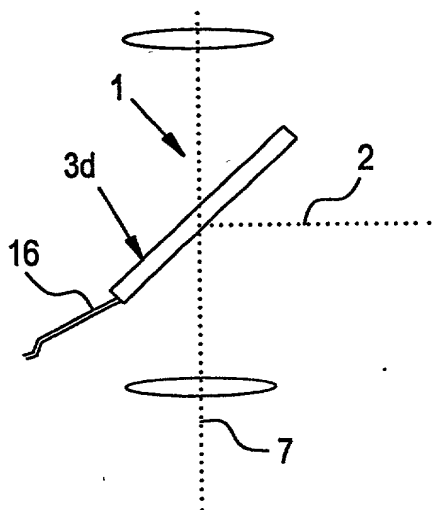


FIG. 10

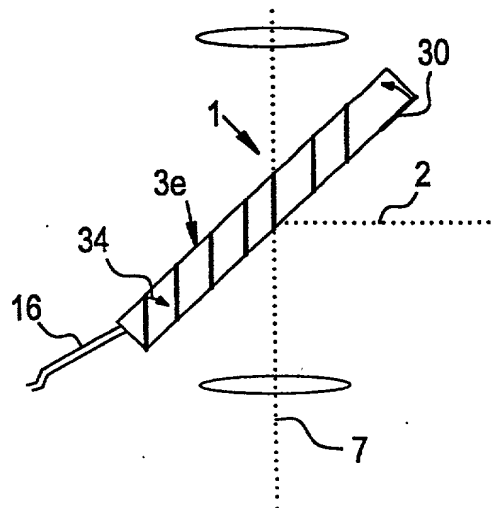


FIG. 11

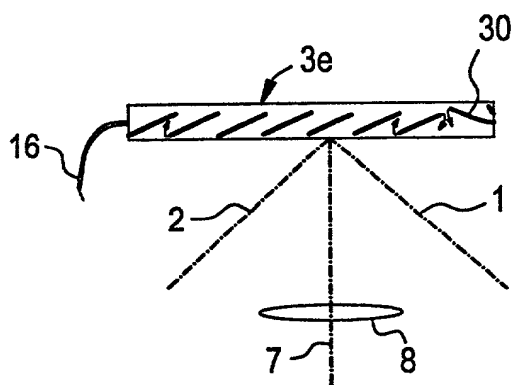


FIG. 12

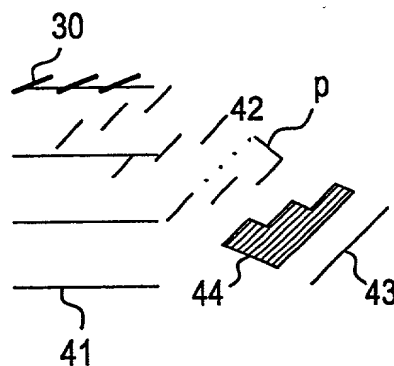


FIG. 13

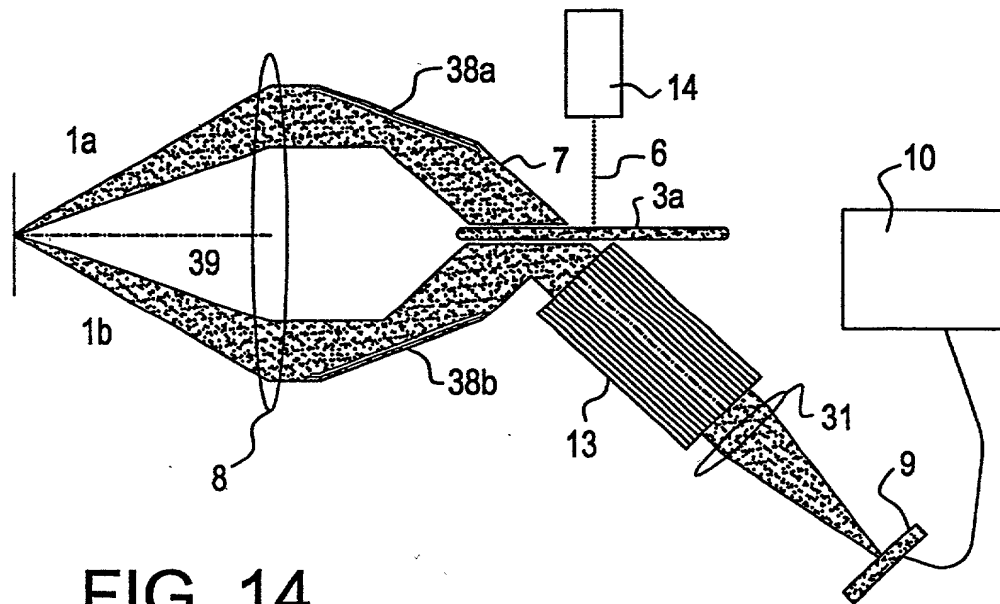


FIG. 14

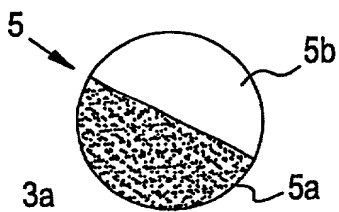


FIG. 15

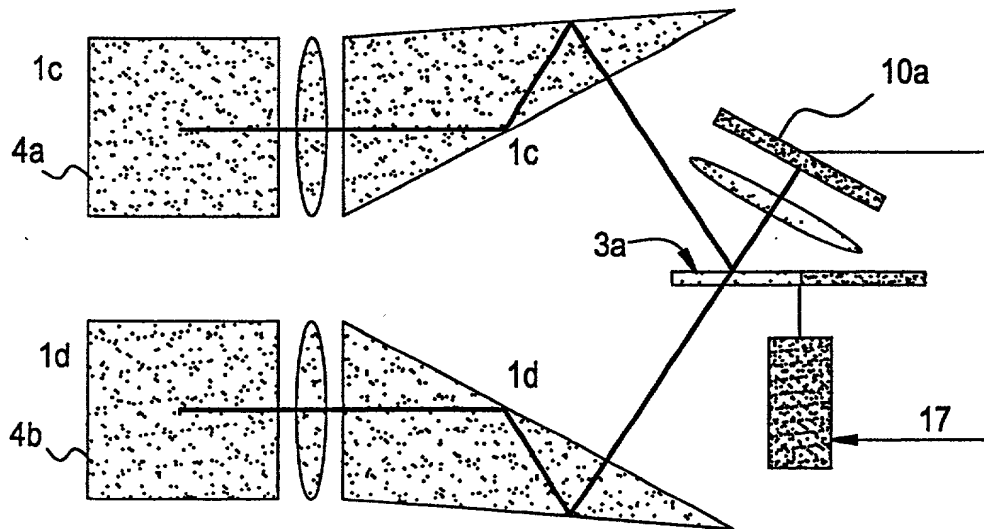


FIG. 16

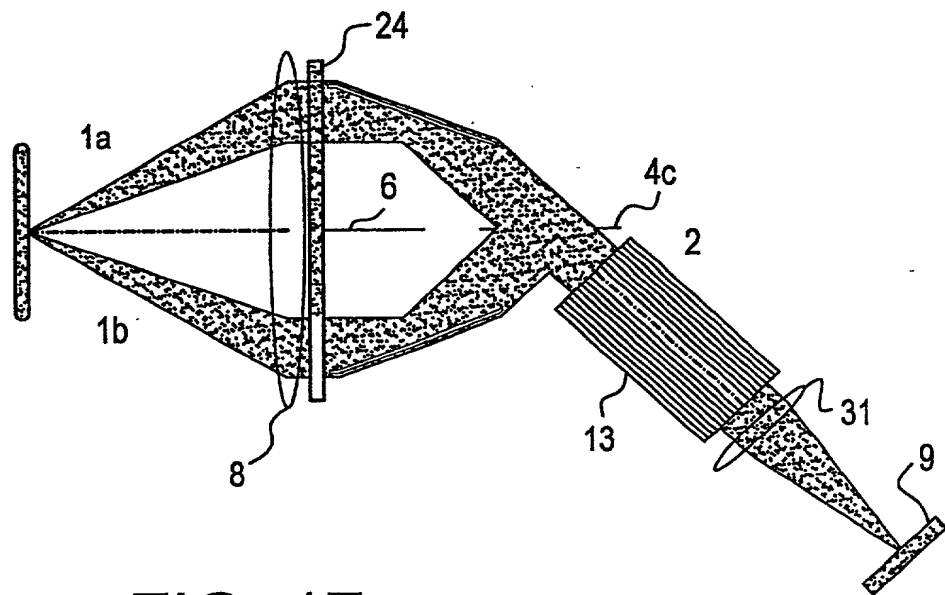


FIG. 17

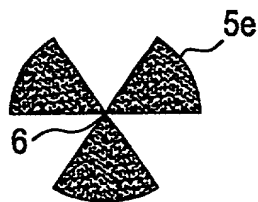


FIG. 18

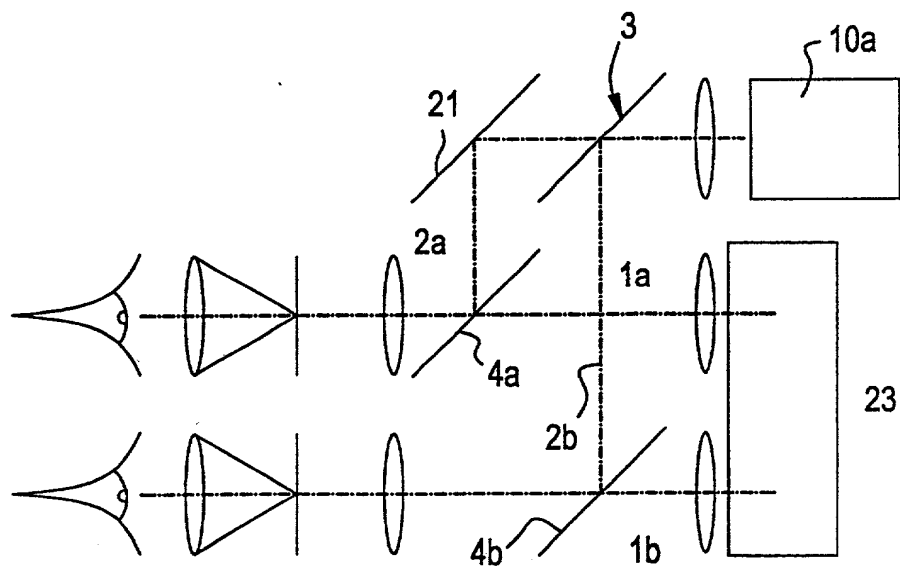


FIG. 19

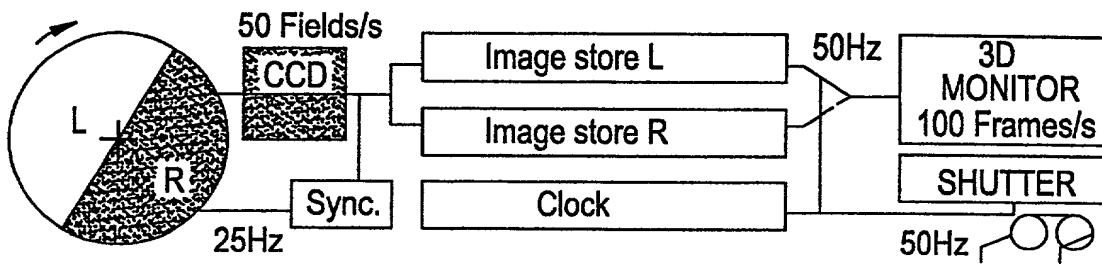


FIG. 20

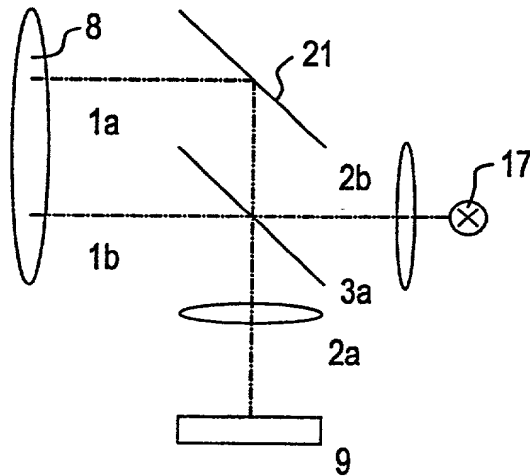


FIG. 21

1) Arrangement having polarization for encoding the left and right beam paths:

Left	Right	
1.0	1.0	100% UNPOLARIZED OBJECT LIGHT
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	
\otimes	\longleftrightarrow	
$\frac{0.5s \cdot 0.84}{0.42s}$	$\frac{0.5p \cdot 0.84}{0.42p}$	POLARIZATION and effectiveness τ linearly s- and p- polarized light
		BEAM COMBINATION BY 50/50 SPLITTER
$\frac{0.5}{0.21s}$	$\frac{0.5}{0.21p}$	combined s- and p- beams
$\frac{0.84 \cdot 0.5}{0.09s}$	$\frac{0.84 \cdot 0.5}{0.09p}$	PERIODIC S- AND P- ANALYZER and time factor
<u>0.09s</u>	<u>0.09p</u>	<u>Light on the detector (CCD)</u>

2) Arrangement having reflection aperture diaphragms for the consecutive switching of the left and right beam path:

Left	Right	
1.0	1.0	100% OBJECT LIGHT
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	
$\frac{1.0 \cdot 0.5}{0.5}$	$\frac{1.0 \cdot 0.5}{0.5}$	BEAM COMBINATION BY ROTATING MIRROR and time factor
<u>0.5</u>	<u>0.5</u>	Combined beam = <u>Light on the detector (CCD)</u>

3) Relation of 1) to 2):

Improvement:

$$0.5 / 0.09 = 5.5$$

Note:

Serial sampling is used in both solutions.

FIG. 22

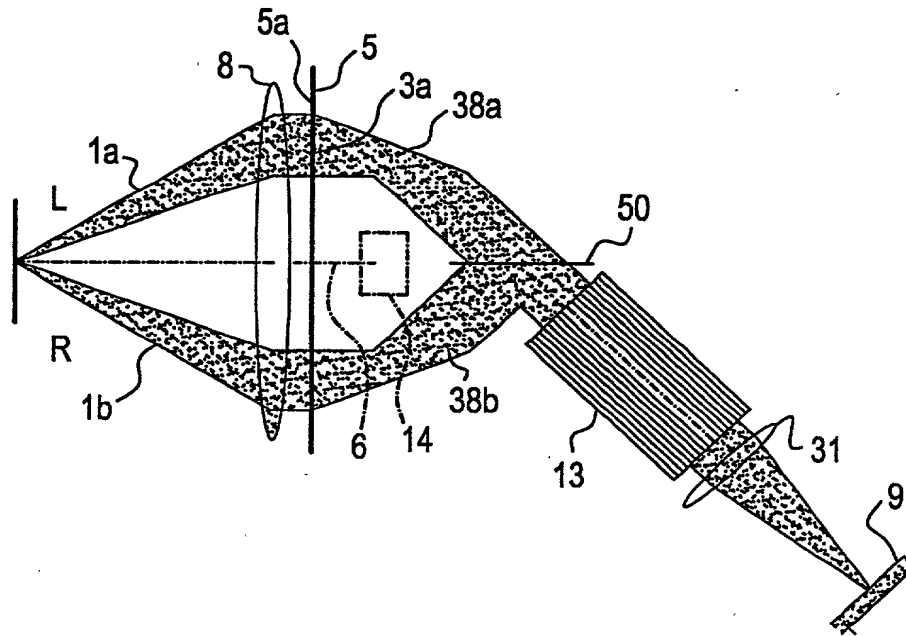


FIG. 23

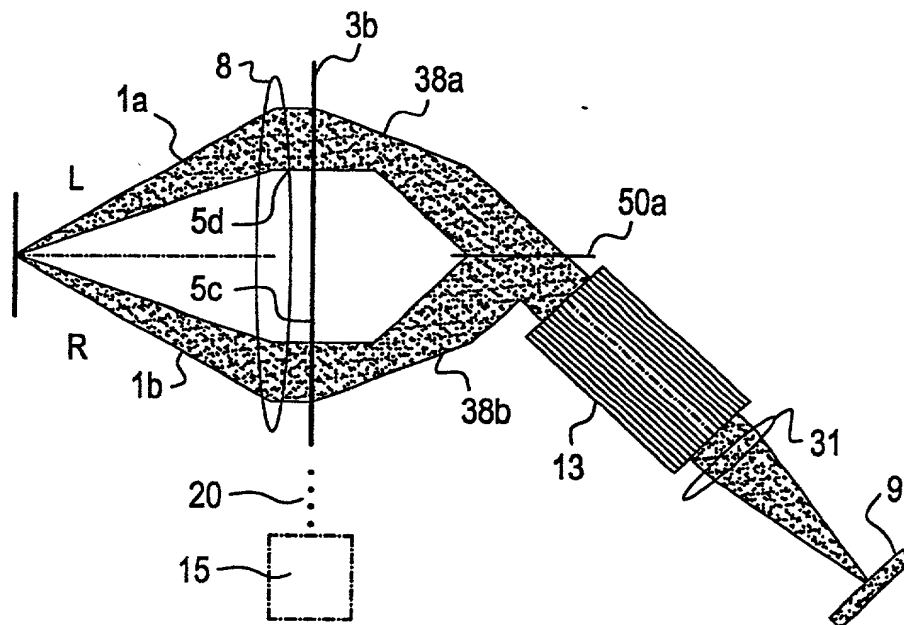


FIG. 1 is a schematic diagram of a stereoscopic display system. A central display unit (10a) is shown at the bottom, labeled "Display". It is connected to a power source (16e). Above the display is a lens (33) and a series of optical elements. A vertical line (14) represents the optical axis. The system is divided into left (L) and right (R) channels. The left channel includes a lens (18a), a half-silvered mirror (50a), and a lens (19a). The right channel includes a lens (18b), a half-silvered mirror (50a), and a lens (19b). The optical axis (14) passes through the center of the system. The display unit (10a) is labeled "D 100%". The left and right channels are labeled "L 100%" and "R 100%". The half-silvered mirrors are labeled "50%L" and "50%D". The lenses are labeled "1a", "2a", "2b", "3a", "3b", and "33". The power source is labeled "16e".

The diagram illustrates a laser beam delivery system. A laser source (12) emits a beam (16a) through a mirror (22) and a lens (8) to a fiber optic cable (13). The beam is then directed by a mirror (31) to a target (9). The system includes various components labeled with numbers and letters, such as 1a, 1b, 3a, 3b, 5a, 5b, 6, 14, 16b, 16c, 16d, 16e, 17a, 17b, 38a, 38b, and 50b.

FIG. 26

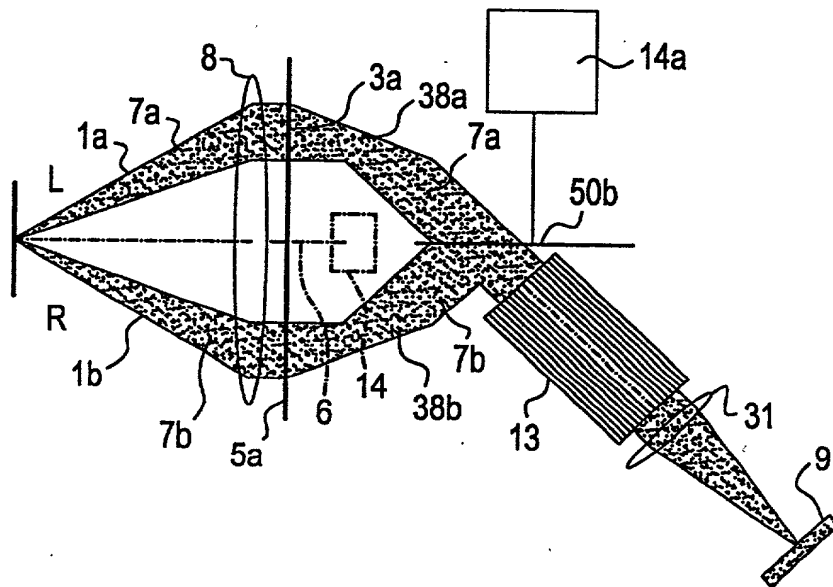


FIG. 27

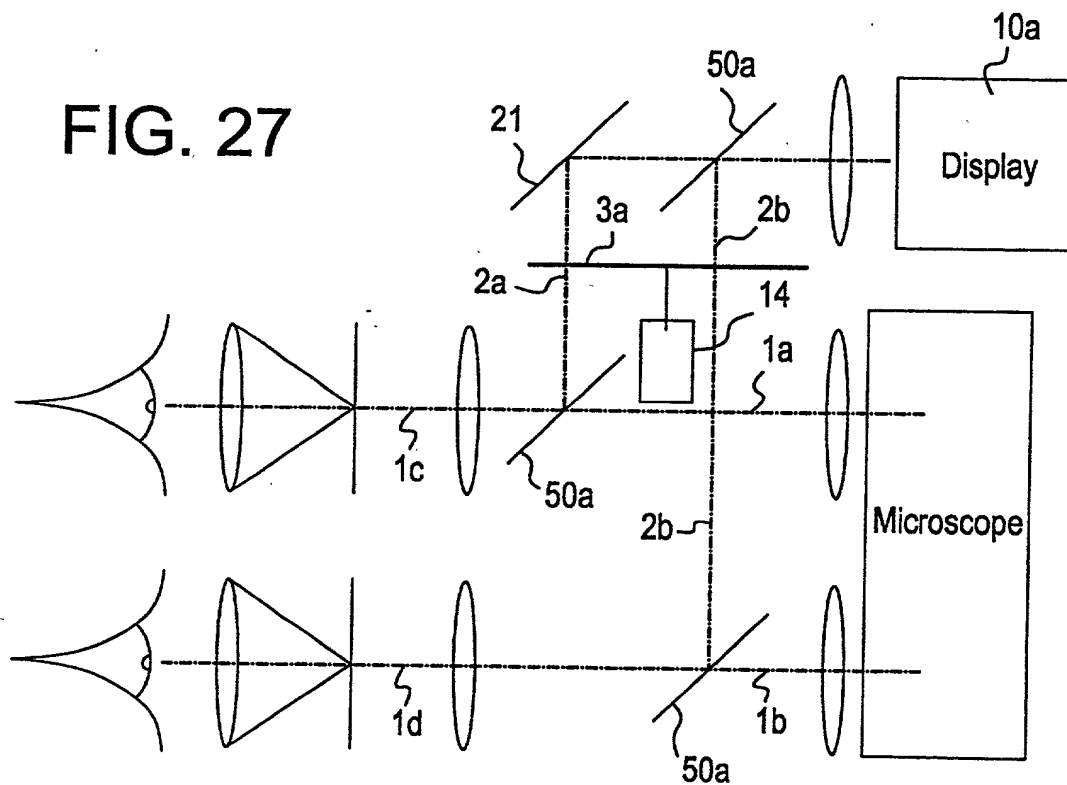


FIG. 28

